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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,405

09/24/2003

Susan I. Shelso

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CROMPTON, SEAGER & TUFTE, LLC
1221 NICOLLET AVENUE
SUITE 800
MINNEAPOLIS, MN 55403-2420

EXAMINER

BOUCHELLE, LAURA A

ART UNIT

PAPER NUMBER

3763

MAIL DATE

DELIVERY MODE

10/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/670,405	Applicant(s) SHELSON, SUSAN I.	
	Examiner LAURA A. BOUCHELLE	Art Unit 3763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/09 has been entered.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 11-17, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frid et al (US 6159228) in view of Gunderson (US5776142). Frid discloses an applicator for a stent comprising an outer shaft 7 and an inner shaft 5 slidably disposed within and concentric with the outer shaft, a rigid inner member 11, the proximal end of the inner rigid member is coupled to the proximal end of the inner shaft, a catheter 9 coupled to the rigid inner member, and an exterior tube 12 coupled to the outer shaft. The inner and outer shafts include gripping portions. The distal end of the catheter has a mounting region for mounting a treatment element 1, the treatment element mounting region is covered by the distal end of the sheath in the first position (see fig. 5) and uncovered by the sheath in the second position (see fig. 6).
2. Claims 11, 19, 20 differ from Frid in calling for the inner and outer shaft portions to have a second position wherein the distal end of the inner shaft engages the distal end of the outer shaft, and in calling for the distal end of the inner shaft to be positioned within the lumen of the

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outer shaft in the first position. Gunderson teaches a stent delivery device similar to the device of Frid having an outer shaft 30 and an inner shaft 28, the inner shaft is slidable between a first delivery position and a second deployed position, a rigid inner member defining a lumen through the inner shaft, and a tube coupled to the distal end of the outer tubular member. The distal end of the inner shaft is positioned within the outer shaft at all point in the use of the device. This configuration of the inner and outer shafts allows for the relative movement between the distal ends of the first and second shafts to be prevented during delivery of the device to the treatment site and then precisely controlled during deployment of the stent (col. 5, lines 6-15) allowing the stent to be positioned correctly to maximize therapeutic benefits. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the device of Frid to include the proximal shaft configuration of Gunderson to increase control over the relative movement of the distal ends of the shafts by engaging the proximal end of the shafts during the insertion and deployment of the stent to increase accuracy when placing the stent.

3. Claims 11, 19, 20 further differ from the teachings above in calling for the exterior tube to be stepped. In the instant application the outer tube is stepped to receive the distal end of the outer shaft while still being slim enough at the distal portion to be easily inserted into the vasculature. Instead of being stepped at the proximal end to accommodate the outer shaft member, Frid teaches that the exterior tube is received within the distal end of the outer shaft member. Both are known methods of attaching two components such as a tube and a hub while maintaining the necessary small diameter at the distal end of the tube. Therefore, it would have been an obvious matter of design choice to include a stepped exterior tube wherein the larger

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diameter portion receives the hub in the device of Frid instead of having a constant diameter tube wherein the distal end is received by the hub.

4. Claims 10, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable Frid in view of Gunderson, in view of DiCaprio et al (US 6176843). Claims 10, 18 differ from Frid in view of Gunderson in calling for a valve to flush air from the sheath. DiCaprio teaches a device for delivering a stent having a valve 34 that allows air to be forced out of the lumen to prevent the possibility of an air embolism forming. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the device of Frid in view of Roberts to have a valve as taught by DiCaprio to allow air to be purged from the lumen.

Response to Arguments

3. Applicant's arguments, see pages 6-7, filed 8/6/09, with respect to the rejection(s) of claim(s) 11, 19, 20 under Frid in view of Roberts have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Frid in view of Gunderson.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA A. BOUCHELLE whose telephone number is (571)272-2125. The examiner can normally be reached on Monday-Friday 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on 517-272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura A Bouchelle
Examiner
Art Unit 3763

/Laura A Bouchelle/
Examiner, Art Unit 3763

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763